

## APPENDIX E

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Table E.1. Recreation Consumptive Activities - Preferred Alternative - State Waters - Santa Barbara County Step 1

	Charter Boat Fishing		Charter Boat Diving		Private Boat Fishing		Private Boat Diving	
	Boundary	% of Study Area <sup>2</sup>	Boundary	% of Study Area <sup>2</sup>	Boundary	% of Study Area <sup>2</sup>	Boundary	% of Study Area <sup>2</sup>
Person-days	1,474	16.84%	507	15.98%	1,463	14.02%	1,984	25.01%
<b>Market Impact</b>								
Direct Sales	\$ 209,787	16.84%	\$ 74,587	15.98%	\$ 60,779	14.02%	\$ 109,145	25.01%
Direct Wages and Salaries	\$ 98,476	16.84%	\$ 36,453	15.98%	\$ 18,184	14.02%	\$ 31,779	25.01%
Direct Employment	4	17.13%	1	16.21%	1	13.21%	1	27.18%
<b>Total Income</b>								
Upper Bound	\$ 172,333	16.84%	\$ 63,792	15.98%	\$ 31,822	14.02%	\$ 55,613	25.01%
Lower Bound	\$ 147,714	16.84%	\$ 54,679	15.98%	\$ 27,276	14.02%	\$ 47,668	25.01%
<b>Total Employment</b>								
Upper Bound	6	16.62%	2	15.63%	1	14.16%	2	25.48%
Lower Bound	5	16.82%	2	16.58%	1	13.76%	2	24.27%
<b>Non-Market Impact</b>								
Consumer's Surplus	\$ 17,072	16.84%	\$ 5,867	15.98%	\$ 16,945	14.02%	\$ 22,977	25.01%
Profit <sup>1</sup>	\$ 4,374	16.84%	\$ 1,079	15.98%	n/a	n/a	n/a	n/a

1. Profit is used as a proxy for producer's surplus.

2. Amount of activity/economic measure impacted by the alternative in the county divided by the total amount of activity/economic measure in the county related to the study area.

Table E.2. Charter Party Boat Fishing - Preferred Alternative - State Waters - Santa Barbara County Step 1 Analysis

Expenditure Category	Expenditure Per Person		Wages to Sales Ratio		Wages to Employment Ratio		Employment
	Per Day \$	Total Expenditures \$		Wages & Salary			
Food	15.47	22,809	0.185405925	4,229	11786.88293		0.4
Lodging	8.65	12,754	0.232375514	2,964	14245.93348		0.2
Private Transportation	16.64	24,534	0.170880464	4,192	21624.38212		0.2
Public Transportation	33.07	48,759	0.170880464	8,332	21624.38212		0.4
Boat Fuel	0.00	0	0.056686529	0	12788.05621		0.0
Access/Boat launch Fees	1.18	1,740	0.231621184	403	20200.13202		0.0
Equipment Rental	6.01	8,861	0.272281346	2,413	14929.50237		0.2
Bait and Ice	0.52	767	0.104264901	80	18232.86584		0.0
Charter Boat fee	60.74	89,563	0.239509323	21,451	12917.92929		1.7
<b>Total</b>	<b>142.28</b>	<b>209,787</b>		<b>44,064</b>			<b>3.0</b>
Total Income to Wages & Salary	2.234846794			Total Direct Income <sup>1</sup>	98,476	Total Direct Employment <sup>2</sup>	3.8
Regional Income Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>	
Lower 2.0			Lower	<b>147,714</b>	Lower		<b>4.7</b>
Upper 2.5			Upper	<b>172,333</b>	Upper		<b>5.7</b>
Proprietors Income to Total Income by Work	0.188784335			% County by Place of Work		% County	0.000%
Proprietors Income to Employment	23974.67315				0.002%		
Regional Employment Multiplier				% County by Place of Residence			
Lower 1.5							
Upper 2.0					0.001%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).

2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).

3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).

4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

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Table E.3. Charter Party Boat Diving - Preferred Alternative - State Waters - Santa Barbara County Step 1 Analysis

Expenditure Category	Expenditure Per Person Per Day \$	Total Expenditures \$	Wages to Sales Ratio	Wages & Salary	Wages to Employment Ratio	Employment
Lodging	53.00	26,854	0.23237551	6,240	14,246	0.4
Eating & Drinking	29.00	14,694	0.17458227	2,565	11,194	0.2
Transportation	10.00	5,067	0.17088046	866	21,624	0.0
Charter Boat fee	40.21	20,373	0.23950932	4,879	12,918	0.4
Miscellaneous	15.00	7,600	0.23162118	1,760	20,200	0.1
<b>Total</b>	<b>147.21</b>	<b>74,587</b>		<b>16,311</b>		<b>1.2</b>
Total Income to				Total Direct Income <sup>1</sup>	Total Direct Employment <sup>2</sup>	
Wages & Salary	2.234846794			36,453		1.5
Regional Income				Total Income <sup>3</sup>	Total Employment <sup>4</sup>	
Multiplier						
Lower 2.0			Lower	<b>54,679</b>	Lower	<b>1.8</b>
Upper 2.5			Upper	<b>63,792</b>	Upper	<b>2.2</b>
Proprietors Income to						
Total Income by Work	0.188784335			% County by	% County	
Proprietors Income				Place of Work		0.000%
to Employment	23974.67315			0.001%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.001%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

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Table E.4. Private Boat Fishing - Preferred Alternative - State Waters - Santa Barbara County Step 1 Analysis

Expenditure Category	Expenditure		Wages to		Wages to	
	Per Person	Total Expenditures \$	Sales	Wages & Salary	Employment	Employment
	Per Day \$		Ratio		Ratio	
Food	7.60	11,123	0.185405925	2,062	11786.88293	0.2
Lodging	1.20	1,756	0.232375514	408	14245.93348	0.0
Private Transportation	8.90	13,025	0.170880464	2,226	21624.38212	0.1
Public Transportation	1.89	2,766	0.170880464	473	21624.38212	0.0
Boat Fuel	12.74	18,645	0.056686529	1,057	12788.05621	0.1
Access/Boat launch Fees	1.52	2,225	0.231621184	515	20200.13202	0.0
Equipment Rental	0.91	1,332	0.272281346	363	14929.50237	0.0
Bait and Ice	6.77	9,908	0.104264901	1,033	18232.86584	0.1
Charter Boat fee	0.00	0	0.239509323	0	12917.92929	0.0
<b>Total</b>	<b>41.53</b>	<b>60,779</b>		<b>8,137</b>		<b>0.5</b>
Total Income to Wages & Salary	2.234846794			Total Direct Income <sup>1</sup> 18,184	Total Direct Employment <sup>2</sup>	0.7
Regional Income Multiplier				Total Income <sup>3</sup>	Total Employment <sup>4</sup>	
Lower 2.0			Lower	<b>27,276</b>	Lower	<b>0.8</b>
Upper 2.5			Upper	<b>31,822</b>	Upper	<b>1.0</b>
Proprietors Income to Total Income by Work	0.188784335			% County by Place of Work	% County	
Proprietors Income to Employment	23974.67315			0.000%		0.000%
Regional Employment Multiplier						
Lower 1.5				% County by Place of Residence		
Upper 2.0				0.000%		

1. Direct wages and salaries is calculated using the following formula:  $x\alpha$  (see below for symbol definitions).

2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).

3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).

4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment

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Table E.5. Private Boat Diving - Preferred Alternative - State Waters - Santa Barbara County Step 1 Analysis

Expenditure Category	Expenditure		Wages to		Wages to		Employment
	Per Person	Total Expenditures \$	Sales	Wages & Salary	Employment	Ratio	
Boat Gas & Oil	19.00	37,705	0.056686529	2,137	12,788		0.2
Air Refills	7.00	13,891	0.239509323	3,327	12,918		0.3
Ice	2.50	4,961	0.104264901	517	18,233		0.0
Boat Ramp Fee	1.50	2,977	0.239509323	713	12,918		0.1
Food & Drink	11.00	21,829	0.174582272	3,811	11,194		0.3
Auto Gas	9.00	17,860	0.056686529	1,012	12,788		0.1
Equipment Rental	5.00	9,922	0.272281346	2,702	14,930		0.2
Total	55.00	109,145		<b>14,220</b>			<b>1.1</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>	
Wages & Salary	2.234846794			31,779			1.4
Regional Income							
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>	
Lower 2.0			Lower	<b>47,668</b>	Lower		<b>1.7</b>
Upper 2.5			Upper	<b>55,613</b>	Upper		<b>2.0</b>
Proprietors Income to							
Total Income by Work	0.188784335			% County by		% County	
Proprietors Income				Place of Work			0.000%
to Employment	23974.67315				0.001%		
Regional Employment							
Multiplier							
Lower 1.5				% County by			
Upper 2.0				Place of Residence			
					0.000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment

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Table E.6. Recreation Consumptive Activities - Preferred Alternative - State Waters - Ventura County Step 1

	Charter Boat Fishing		Charter Boat Diving		Private Boat Fishing		Private Boat Diving	
	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>
Person-days	16,581	11.16%	2,636	18.31%	27,126	14.09%	8,351	24.52%
<b>Market Impact</b>								
Direct Sales	\$ 2,141,636	11.16%	\$ 452,141	18.31%	\$ 1,126,541	14.09%	\$ 459,302	24.52%
Direct Wages and Salaries	\$ 985,486	11.16%	\$ 219,133	18.31%	\$ 321,697	14.09%	\$ 123,299	24.52%
Direct Employment	28	11.17%	7	18.41%	11	14.00%	4	24.27%
<b>Total Income</b>								
Upper Bound	\$ 1,724,601	11.16%	\$ 383,482	18.31%	\$ 562,969	14.09%	\$ 215,774	24.52%
Lower Bound	\$ 1,478,229	11.16%	\$ 328,699	18.31%	\$ 482,545	14.09%	\$ 184,949	24.52%
<b>Total Employment</b>								
Upper Bound	43	11.17%	10	18.41%	16	14.06%	6	24.75%
Lower Bound	35	11.15%	9	18.22%	13	14.04%	5	24.55%
<b>Non-Market Impact</b>								
Consumer's Surplus	\$ 191,990	11.16%	\$ 30,526	18.31%	\$ 314,085	14.09%	\$ 96,694	24.52%
Profit <sup>1</sup>	\$ 38,160	11.16%	\$ 6,445	18%	n/a	n/a	n/a	n/a

1. Profit is used as a proxy for producer's surplus.

2. Amount of activity/economic measure impacted by the alternative in the county divided by the total amount of activity/economic measure in the county related to the study area.

Table E.7. Charter Party Boat Fishing - Preferred Alternative - State Waters - Ventura County Step 1 Analysis

Expenditure Category	Expenditure Per Person Per Day \$	Total Expenditures \$	Wages to Sales		Wages to Employment		Employment
			Ratio	Wages & Salary	Ratio		
Food	15.47	256,512	0.171537003	44,001	11740.46679		3.7
Lodging	8.65	143,428	0.213109652	30,566	14138.05668		2.2
Private Transportation	16.64	275,912	0.166580417	45,962	21582.30187		2.1
Public Transportation	33.07	548,342	0.166580417	91,343	21582.30187		4.2
Boat Fuel	0.00	0	0.037661501	0	13082.33276		0.0
Access/Boat launch Fees	1.18	19,566	0.197079821	3,856	26686.02901		0.1
Equipment Rental	6.01	99,653	0.24102252	24,019	26205.88235		0.9
Bait and Ice	0.52	8,622	0.105851657	913	19902.47277		0.0
Charter Boat fee	47.62	789,601	0.229005998	180,823	24,860		7.3
<b>Total</b>	<b>129.16</b>	<b>2,141,636</b>		<b>421,482</b>			<b>20.7</b>
<b>Total Income to</b>							
Wages & Salaries	2.338143047			Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>	28.4
Regional Income Multiplier				985,486			
Lower 2.0			Lower	Total Income <sup>3</sup>		Total Employment <sup>4</sup>	35.5
Upper 2.5			Upper	1,478,229	Lower		
Proprietors Income to Total Income by Work	0.164550026			1,724,601	Upper		42.5
Proprietors Income to Employment	21027.31293						
Regional Employment Multiplier				% County by Place of Work		% County	0.043%
Lower 1.5							
Upper 2.0				% County by Place of Residence			
					0.008%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).

2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).

3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).

4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment

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Table E.8. Charter Party Boat Diving - Preferred Alternative - State Waters - Ventura County Step 1 Analysis

Expenditure Category	Expenditure Per Person	Total Expenditures \$	Wages to Sales	Wages & Salary	Wages to Employment	Employment
	Per Day \$		Ratio		Ratio	
Lodging	53.00	139,729	0.21310965	29,778	14,138	2.1
Eating & Drinking	29.00	76,455	0.16762701	12,816	11,507	1.1
Transportation	10.00	26,364	0.16658042	4,392	21,582	0.2
Charter Boat fee	64.50	170,048	0.229006	38,942	24,860	1.6
Miscellaneous	15.00	39,546	0.19707982	7,794	26,686	0.3
<b>Total</b>	<b>171.50</b>	<b>452,141</b>		<b>93,721</b>		<b>5.3</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	2.338143047			219,133		7.0
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	<b>328,699</b>	Lower	<b>8.7</b>
Upper 2.5			Upper	<b>383,482</b>	Upper	<b>10.5</b>
Proprietors Income to						
Total Income by Work	0.164550026			% County by	% County	
Proprietors Income				Place of Work		0.011%
to Employment	21027.31293			0.003%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.002%		

1. Direct wages and salaries is calculated using the following formula:  $x\alpha$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment

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Table E.9. Private Boat Fishing - Preferred Alternative - State Waters - Ventura County Step 1 Analysis

Expenditure Category	Expenditure	Wages to		Wages to		Employment
	Per Person Per Day \$	Total Expenditures \$	Sales Ratio	Wages & Salary	Employment Ratio	
Food	7.60	206,157	0.171537003	35,364	11740.46679	3.0
Lodging	1.20	32,551	0.213109652	6,937	14138.05668	0.5
Private Transportation	8.90	241,421	0.166580417	40,216	21582.30187	1.9
Public Transportation	1.89	51,268	0.166580417	8,540	21582.30187	0.4
Boat Fuel	12.74	345,585	0.037661501	13,015	13082.33276	1.0
Access/Boat launch Fees	1.52	41,231	0.197079821	8,126	26686.02901	0.3
Equipment Rental	0.91	24,685	0.24102252	5,950	26205.88235	0.2
Bait and Ice	6.77	183,643	0.105851657	19,439	19902.47277	1.0
Charter Boat fee	0.00	0	0.229005998	0	24,860	0.0
<b>Total</b>	<b>41.53</b>	<b>1,126,541</b>		<b>137,586</b>		<b>8.3</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	2.338143047			321,697		10.8
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0		Lower		<b>482,545</b>	Lower	<b>13.5</b>
Upper 2.5		Upper		<b>562,969</b>	Upper	<b>16.2</b>
Proprietors Income to						
Total Income by Work	0.164550026			% County by		% County
Proprietors Income				Place of Work		0.016%
to Employment	21027.31293			0.005%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.003%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment



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Table E.10. Private Boat Diving - Preferred Alternative - State Waters - Ventura County Step 1 Analysis

Expenditure Category	Expenditure	Total Expenditures \$	Wages to	Wages & Salary	Wages to	Employment
	Per Person		Sales		Employment	
	Per Day \$		Ratio		Ratio	
Boat Gas & Oil	19.00	158,668	0.037661501	5,976	13,082	0.5
Air Refills	7.00	58,457	0.229005998	13,387	24,860	0.5
Ice	2.50	20,877	0.105851657	2,210	19,902	0.1
Boat Ramp Fee	1.50	12,526	0.229005998	2,869	24,860	0.1
Food & Drink	11.00	91,860	0.167627006	15,398	11,507	1.3
Auto Gas	9.00	75,159	0.037661501	2,831	13,082	0.2
Equipment Rental	5.00	41,755	0.24102252	10,064	26,206	0.4
Total	55.00	<b>459,302</b>		<b>52,734</b>		<b>3.2</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	2.338143047			123,299		4.1
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0		Lower		<b>184,949</b>	Lower	<b>5.2</b>
Upper 2.5		Upper		<b>215,774</b>	Upper	<b>6.2</b>
Proprietors Income to						
Total Income by Work	0.164550026			% County by		% County
Proprietors Income				Place of Work		0.006%
to Employment	21027.31293			0.002%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.001%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX E

Table E.11. Recreation Consumptive Activities - Preferred Alternative - State Waters - LA County Step 1

	Charter Boat Fishing		Charter Boat Diving		Private Boat Fishing		Private Boat Diving	
	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>
Person-days	257	18.69%	93	25.62%	1,559	14.16%	1,289	24.78%
<b>Market Impact</b>								
Direct Sales	\$ 36,334	18.70%	\$ 18,608	25.65%	\$ 64,728	14.16%	\$ 70,912	24.78%
Direct Wages and Salaries	\$ 10,480	18.70%	\$ 6,183	25.65%	\$ 12,151	14.16%	\$ 13,286	24.78%
Direct Employment	0	17.42%	0	21.30%	1	14.16%	1	24.77%
<b>Total Income</b>								
Upper Bound	\$ 18,340	18.70%	\$ 10,820	25.65%	\$ 21,264	14.16%	\$ 23,250	24.78%
Lower Bound	\$ 15,720	18.70%	\$ 9,274	25.65%	\$ 18,227	14.16%	\$ 19,928	24.78%
<b>Total Employment</b>								
Upper Bound	1	17.42%	0	31.94%	1	14.16%	1	24.81%
Lower Bound	0	21.78%	0	26.62%	1	14.16%	1	24.80%
<b>Non-Market Impact</b>								
Consumer's Surplus	\$ 2,973	18.70%	\$ 1,080	25.64%	\$ 18,046	14.16%	\$ 14,929	24.78%
Profit <sup>1</sup>	\$ 1,540	18.70%	\$ 528	25.65%	n/a	n/a	n/a	n/a

1. Profit is used as a proxy for producer's surplus.

2. Amount of activity/economic measure impacted by the alternative in the county divided by the total amount of activity/economic measure in the county related to the study area.

Table E.12. Charter Party Boat Fishing - Preferred Alternative - State Waters - LA County Step 1 Analysis

	Expenditure		Wages to		Wages to	
	Per Person		Sales		Employment	
Expenditure Category	Per Day \$	Total Expenditures \$	Ratio	Wages & Salary	Ratio	Employment
Food	15.47	3,973	0.175118965	696	12848.82845	0.1
Lodging	8.65	2,221	0.20181569	448	16112.61061	0.0
Private Transportation	16.64	4,273	0.119408566	510	19952.00329	0.0
Public Transportation	33.07	8,492	0.119408566	1,014	19952.00329	0.1
Boat Fuel	0.00	0	0.039248605	0	13772.40377	0.0
Access/Boat launch Fees	1.18	303	0.268261264	81	29734.05276	0.0
Equipment Rental	6.01	1,543	0.243828383	376	19544.97354	0.0
Bait and Ice	0.52	134	0.103146649	14	19023.1563	0.0
Charter Boat fee	59.95	15,394	0.205539552	3,164	28,630	0.1
Total	141.49	36,334		6,304		0.3
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	1.662507805			10,480		0.3
Regional Income				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Multiplier						
Lower 2.0			Lower	15,720	Lower	0.4
Upper 2.5			Upper	18,340	Upper	0.5
Proprietors Income to						
Total Income by Work	0.144206695			% County by		% County
Proprietors Income				Place of Work		0.00000005%
to Employment	26601.36574			0.000009%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.000007%		

1. Direct wages and salaries is calculated using the following formula:  $xx$  (see below for symbol definitions).
2. Direct employment takes into account proprietors employment by using the following formula:  $(\beta x)/\gamma + y$  (see below for symbol definitions).
3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment

## APPENDIX E

Table E.13. Charter Party Boat Diving - Preferred Alternative - State Waters - LA County Step 1 Analysis

Expenditure Category	Expenditure	Wages to		Wages to		Employment
	Per Person Per Day \$	Total Expenditures \$	Sales Ratio	Wages & Salary	Employment Ratio	
Lodging	53.00	4,942	0.20181569	997	16,113	0.1
Eating & Drinking	29.00	2,704	0.17046229	461	12,333	0.0
Transportation	10.00	932	0.11940857	111	19,952	0.0
Charter Boat fee	92.56	8,631	0.20553955	1,774	28,630	0.1
Miscellaneous	15.00	1,399	0.26826126	375	29,734	0.0
Total	199.56	<b>18,608</b>		<b>3,719</b>		<b>0.2</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	1.662507805			6,183		0.2
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	<b>9,274</b>	Lower	<b>0.3</b>
Upper 2.5			Upper	<b>10,820</b>	Upper	<b>0.3</b>
Proprietors Income to						
Total Income by Work	0.144206695			% County by	% County	
Proprietors Income				Place of Work		0.00000003%
to Employment	26601.36574			0.000005%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.000004%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment takes into account proprietors employment by using the following formula:  $(\beta x)/\gamma + y$  (see below for symbol definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment

# APPENDIX E

Table E.14. Private Boat Fishing - Preferred Alternative - State Waters - LA County Step 1 Analysis

Expenditure Category	Expenditure Per Person Per Day \$	Total Expenditures \$	Wages to Sales Ratio	Wages & Salary	Wages to Employment Ratio	Employment
Food	7.60	11,845	0.175118965	2,074	12848.82845	0.2
Lodging	1.20	1,870	0.20181569	377	16112.61061	0.0
Private Transportation	8.90	13,871	0.119408566	1,656	19952.00329	0.1
Public Transportation	1.89	2,946	0.119408566	352	19952.00329	0.0
Boat Fuel	12.74	19,856	0.039248605	779	13772.40377	0.1
Access/Boat launch Fees	1.52	2,369	0.268261264	636	29734.05276	0.0
Equipment Rental	0.91	1,418	0.243828383	346	19544.97354	0.0
Bait and Ice	6.77	10,552	0.103146649	1,088	19023.1563	0.1
Charter Boat fee	0.00	0	0.205539552	0	28,630	0.0
<b>Total</b>	<b>41.53</b>	<b>64,728</b>		<b>7,309</b>		<b>0.4</b>
Total Income to				Total Direct Income <sup>1</sup>	Total Direct Employment <sup>2</sup>	
Wages & Salary	1.662507805			12,151		0.5
Regional Income						
Multiplier				Total Income <sup>3</sup>	Total Employment <sup>4</sup>	
Lower 2.0			Lower	18,227	Lower	0.6
Upper 2.5			Upper	21,264	Upper	0.8
Proprietors Income to						
Total Income by Work	0.144206695			% County by	% County	
Proprietors Income				Place of Work		0.0000001%
to Employment	26601.36574			0.00001%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.00001%		

1. Direct wages and salaries is calculated using the following formula:  $xx$  (see below for symbol definitions).
2. Direct employment takes into account proprietors employment by using the following formula:  $(\beta x)/\gamma + y$  (see below for symbol definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment

# APPENDIX E

Table E.15. Private Boat Diving - Preferred Alternative - State Waters - LA County Step 1 Analysis

Expenditure Category	Expenditure		Wages to		Wages to	
	Per Person		Sales		Employment	
	Per Day \$	Total Expenditures \$	Ratio	Wages & Salary	Ratio	Employment
Boat Gas & Oil	19.00	24,497	0.039248605	961	13,772	0.1
Air Refills	7.00	9,025	0.205539552	1,855	28,630	0.1
Ice	2.50	3,223	0.103146649	332	19,023	0.0
Boat Ramp Fee	1.50	1,934	0.205539552	398	28,630	0.0
Food & Drink	11.00	14,182	0.170462286	2,418	12,333	0.2
Auto Gas	9.00	11,604	0.039248605	455	13,772	0.0
Equipment Rental	5.00	6,447	0.243828383	1,572	19,545	0.1
Total	55.00	<b>70,912</b>		<b>7,991</b>		<b>0.5</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	1.662507805			13,286		0.5
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	<b>19,928</b>	Lower	<b>0.7</b>
Upper 2.5			Upper	<b>23,250</b>	Upper	<b>0.8</b>
Proprietors Income to						
Total Income by Work	0.144206695			% County by	% County	
Proprietors Income				Place of Work		0.00000007%
to Employment	26601.36574			0.00001%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.00001%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment takes into account proprietors employment by using the following formula:  $(\beta x)/\gamma + y$  (see below for symbol definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX E

Table E.16. Recreation Consumptive Activities - Preferred Alternative - Federal Waters - Santa Barbara County Step 1

	Charter Boat Fishing		Charter Boat Diving		Private Boat Fishing		Private Boat Diving	
	Boundary	% of Study	Boundary	% of Study	Boundary	% of Study	Boundary	% of Study
	Alternative	Area <sup>2</sup>	Alternative	Area <sup>2</sup>	Alternative	Area <sup>2</sup>	Alternative	Area <sup>2</sup>
Person-days	276	3.15%	41	1.31%	331	3.17%	95	1.20%
Market Impact								
Direct Sales	\$ 39,289	3.15%	\$ 6,103	1.31%	\$ 13,760	3.17%	\$ 5,246	1.20%
Direct Wages and Salaries	\$ 18,443	3.15%	\$ 2,983	1.31%	\$ 4,117	3.17%	\$ 1,527	1.20%
Direct Employment	1	3.21%	0	1.33%	0	2.99%	0	1.31%
Total Income								
Upper Bound	\$ 32,275	3.15%	\$ 5,220	1.31%	\$ 7,204	3.17%	\$ 2,673	1.20%
Lower Bound	\$ 27,664	3.15%	\$ 4,474	1.31%	\$ 6,175	3.17%	\$ 2,291	1.20%
Total Employment								
Upper Bound	1	3.11%	0	1.28%	0	3.21%	0	1.22%
Lower Bound	1	3.15%	0	1.36%	0	3.12%	0	1.17%
Non-Market Impact								
Consumer's Surplus	\$ 3,197	3.15%	\$ 480	1.31%	\$ 3,836	3.17%	\$ 1,104	1.20%
Profit <sup>1</sup>	\$ 819	3.15%	\$ 88	1.31%	n/a	n/a	n/a	n/a

1. Profit is used as a proxy for producer's surplus.

2. Amount of activity/economic measure impacted by the alternative in the county divided by the total amount of activity/economic measure in the county related to the study area.

Table E.17. Charter Party Boat Fishing - Preferred Alternative - Federal Waters - Santa Barbara County Step 1 Analysis

	Expenditure		Wages to		Wages to	
	Per Person		Sales		Employment	
Expenditure Category	Per Day \$	Total Expenditures \$	Ratio	Wages & Salary	Ratio	Employment
Food	15.47	4,272	0.185405925	792	11786.88293	0.1
Lodging	8.65	2,389	0.232375514	555	14245.93348	0.0
Private Transportation	16.64	4,595	0.170880464	785	21624.38212	0.0
Public Transportation	33.07	9,132	0.170880464	1,560	21624.38212	0.1
Boat Fuel	0.00	0	0.056686529	0	12788.05621	0.0
Access/Boat launch Fees	1.18	326	0.231621184	75	20200.13202	0.0
Equipment Rental	6.01	1,660	0.272281346	452	14929.50237	0.0
Bait and Ice	0.52	144	0.104264901	15	18232.86584	0.0
Charter Boat fee	60.74	16,773	0.239509323	4,017	12917.92929	0.3
Total	142.28	39,289		8,252		0.6
Total Income to Wages & Salary	2.234846794			Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Regional Income Multiplier				18,443		0.7
Lower 2.0				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Upper 2.5			Lower	27,664	Lower	0.9
Proprietors Income to Total Income by Work	0.188784335		Upper	32,275	Upper	1.1
Proprietors Income to Employment	23974.67315			% County by Place of Work		% County
Regional Employment Multiplier				0.000%		0.000%
Lower 1.5				% County by Place of Residence		
Upper 2.0						
				0.000%		

1. Direct wages and salaries is calculated using the following formula:  $x\alpha$  (see below for symbol definitions).

2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).

3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).

4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

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Table E.18. Charter Party Boat Diving - Preferred Alternative - Federal Waters - Santa Barbara County Step 1 Analysis

Expenditure Category	Expenditure Per Person Per Day \$	Total Expenditures \$	Wages to Sales Ratio	Wages & Salary	Wages to Employment Ratio	Employment
Lodging	53.00	2,197	0.23237551	511	14,246	0.0
Eating & Drinking	29.00	1,202	0.17458227	210	11,194	0.0
Transportation	10.00	415	0.17088046	71	21,624	0.0
Charter Boat fee	40.21	1,667	0.23950932	399	12,918	0.0
Miscellaneous	15.00	622	0.23162118	144	20,200	0.0
<b>Total</b>	<b>147.21</b>	<b>6,103</b>		<b>1,335</b>		<b>0.1</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	2.234846794			2,983		0.1
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	<b>4,474</b>	Lower	<b>0.1</b>
Upper 2.5			Upper	<b>5,220</b>	Upper	<b>0.2</b>
Proprietors Income to						
Total Income by Work	0.188784335			% County by	% County	
Proprietors Income				Place of Work		0.000%
to Employment	23974.67315			0.000%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

# APPENDIX E

Table E.19. Private Boat Fishing - Preferred Alternative - Federal Waters - Santa Barbara County Step 1 Analysis

Expenditure Category	Expenditure		Wages to		Wages to		Employment
	Per Person	Total Expenditures \$	Sales	Ratio	Employment	Ratio	
	Per Day \$				Wages & Salary		
Food	7.60	2,518	0.185405925		467	11786.88293	0.0
Lodging	1.20	398	0.232375514		92	14245.93348	0.0
Private Transportation	8.90	2,949	0.170880464		504	21624.38212	0.0
Public Transportation	1.89	626	0.170880464		107	21624.38212	0.0
Boat Fuel	12.74	4,221	0.056686529		239	12788.05621	0.0
Access/Boat launch Fees	1.52	504	0.231621184		117	20200.13202	0.0
Equipment Rental	0.91	302	0.272281346		82	14929.50237	0.0
Bait and Ice	6.77	2,243	0.104264901		234	18232.86584	0.0
Charter Boat fee	0.00	0	0.239509323		0	12917.92929	0.0
<b>Total</b>	<b>41.53</b>	<b>13,760</b>			<b>1,842</b>		<b>0.1</b>
Total Income to					Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	2.234846794				4,117		0.1
Regional Income							
Multiplier					Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower		<b>6,175</b>	Lower	<b>0.2</b>
Upper 2.5			Upper		<b>7,204</b>	Upper	<b>0.2</b>
Proprietors Income to							
Total Income by Work	0.188784335				% County by		% County
Proprietors Income					Place of Work		0.000%
to Employment	23974.67315				0.000%		
Regional Employment							
Multiplier					% County by		
Lower 1.5					Place of Residence		
Upper 2.0					0.000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).

2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).

3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).

4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment



## APPENDIX E

Table E.20. Private Boat Diving - Preferred Alternative - Federal Waters - Santa Barbara County Step 1 Analysis

Expenditure Category	Expenditure Per Person Per Day \$	Total Expenditures \$	Wages to Sales Ratio	Wages & Salary	Wages to Employment Ratio	Employment
Boat Gas & Oil	19.00	1,812	0.056686529	103	12,788	0.0
Air Refills	7.00	668	0.239509323	160	12,918	0.0
Ice	2.50	238	0.104264901	25	18,233	0.0
Boat Ramp Fee	1.50	143	0.239509323	34	12,918	0.0
Food & Drink	11.00	1,049	0.174582272	183	11,194	0.0
Auto Gas	9.00	858	0.056686529	49	12,788	0.0
Equipment Rental	5.00	477	0.272281346	130	14,930	0.0
Total	55.00	5,246		<b>683</b>		<b>0.1</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	2.234846794			1,527		0.1
Regional Income Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0		Lower		<b>2,291</b> Lower		<b>0.1</b>
Upper 2.5		Upper		<b>2,673</b> Upper		<b>0.1</b>
Proprietors Income to				% County by		% County
Total Income by Work	0.188784335			Place of Work		0.000%
Proprietors Income to Employment	23974.67315			0.000%		
Regional Employment Multiplier				% County by		
Lower 1.5				Place of Residence		
Upper 2.0				0.000%		

1. Direct wages and salaries is calculated using the following formula:  $x\alpha$  (see below for symbol definitions).

2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).

3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).

4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX E

Table E.21. Recreation Consumptive Activities - Preferred Alternative - Federal Waters - Ventura County Step 1

	Charter Boat Fishing		Charter Boat Diving		Private Boat Fishing		Private Boat Diving	
	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>	Boundary Alternative	% of Study Area <sup>2</sup>
Person-days	7,170	4.82%	269	1.87%	5,580	2.90%	377	1.11%
<b>Market Impact</b>								
Direct Sales	\$ 926,059	4.82%	\$ 46,148	1.87%	\$ 231,719	2.90%	\$ 20,749	1.11%
Direct Wages and Salaries	\$ 426,131	4.82%	\$ 22,366	1.87%	\$ 66,170	2.90%	\$ 5,570	1.11%
Direct Employment	12	4.83%	1	1.88%	2	2.88%	0	1.10%
<b>Total Income</b>								
Upper Bound	\$ 745,730	4.82%	\$ 39,140	1.87%	\$ 115,798	2.90%	\$ 9,748	1.11%
Lower Bound	\$ 639,197	4.82%	\$ 33,549	1.87%	\$ 99,255	2.90%	\$ 8,355	1.11%
<b>Total Employment</b>								
Upper Bound	18	4.83%	1	1.88%	3	2.89%	0	1.12%
Lower Bound	15	4.82%	1	1.86%	3	2.89%	0	1.11%
<b>Non-Market Impact</b>								
Consumer's Surplus	\$ 83,018	4.82%	\$ 3,116	1.87%	\$ 64,604	2.90%	\$ 4,368	1.11%
Profit <sup>1</sup>	\$ 16,501	4.82%	\$ 658	2%	n/a	n/a	n/a	n/a

1. Profit is used as a proxy for producer's surplus.

2. Amount of activity/economic measure impacted by the alternative in the county divided by the total amount of activity/economic measure in the county related to the study area.

Table E.22. Charter Party Boat Fishing - Preferred Alternative - Federal Waters - Ventura County Step 1 Analysis

Expenditure Category	Expenditure Per Person	Total Expenditures \$	Wages to Sales	Wages & Salary	Wages to Employment	Employment
	Per Day \$		Ratio		Ratio	
Food	15.47	110,918	0.171537003	19,026	11740.46679	1.6
Lodging	8.65	62,019	0.213109652	13,217	14138.05668	0.9
Private Transportation	16.64	119,306	0.166580417	19,874	21582.30187	0.9
Public Transportation	33.07	237,107	0.166580417	39,497	21582.30187	1.8
Boat Fuel	0.00	0	0.037661501	0	13082.33276	0.0
Access/Boat launch Fees	1.18	8,460	0.197079821	1,667	26686.02901	0.1
Equipment Rental	6.01	43,091	0.24102252	10,386	26205.88235	0.4
Bait and Ice	0.52	3,728	0.105851657	395	19902.47277	0.0
Charter Boat fee	47.62	341,429	0.229005998	78,189	24,860	3.1
<b>Total</b>	<b>129.16</b>	<b>926,059</b>		<b>182,252</b>		<b>8.9</b>
<b>Total Income to</b>						
Wages & Salaries	2.338143047			Total Direct Income <sup>1</sup> 426,131		Total Direct Employment <sup>2</sup> 12.3
<b>Regional Income</b>						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	<b>639,197</b>	Lower	<b>15.3</b>
Upper 2.5			Upper	<b>745,730</b>	Upper	<b>18.4</b>
<b>Proprietors Income to</b>						
Total Income by Work	0.164550026			% County by Place of Work		% County
Proprietors Income to Employment	21027.31293			0.006%		0.019%
<b>Regional Employment</b>						
Multiplier				% County by Place of Residence		
Lower 1.5						
Upper 2.0				0.003%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).

2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).

3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).

4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment

## APPENDIX E

Table E.23. Charter Party Boat Diving - Preferred Alternative - Federal Waters - Ventura County Step 1 Analysis

	Expenditure		Wages to		Wages to		
	Per Person		Sales		Employment		
Expenditure Category	Per Day \$	Total Expenditures \$	Ratio	Wages & Salary	Ratio	Employment	
Lodging	53.00	14,261	0.21310965	3,039	14,138		0.2
Eating & Drinking	29.00	7,803	0.16762701	1,308	11,507		0.1
Transportation	10.00	2,691	0.16658042	448	21,582		0.0
Charter Boat fee	64.50	17,356	0.229006	3,975	24,860		0.2
Miscellaneous	15.00	4,036	0.19707982	795	26,686		0.0
Total	171.50	46,148		9,566			0.5
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>	
Wages & Salary	2.338143047			22,366			0.7
Regional Income							
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>	
Lower 2.0			Lower	33,549	Lower		0.9
Upper 2.5			Upper	39,140	Upper		1.1
Proprietors Income to							
Total Income by Work	0.164550026			% County by		% County	
Proprietors Income				Place of Work			0.001%
to Employment	21027.31293			0.000%			
Regional Employment							
Multiplier							
Lower 1.5				% County by			
Upper 2.0				Place of Residence			
				0.000%			

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX E

Table E.24. Private Boat Fishing - Preferred Alternative - Federal Waters - Ventura County Step 1 Analysis

Expenditure Category	Expenditure Per Person Per Day \$	Total Expenditures \$	Wages to Sales Ratio	Wages & Salary	Wages to Employment Ratio	Employment
Food	7.60	42,405	0.171537003	7,274	11740.46679	0.6
Lodging	1.20	6,695	0.213109652	1,427	14138.05668	0.1
Private Transportation	8.90	49,658	0.166580417	8,272	21582.30187	0.4
Public Transportation	1.89	10,545	0.166580417	1,757	21582.30187	0.1
Boat Fuel	12.74	71,084	0.037661501	2,677	13082.33276	0.2
Access/Boat launch Fees	1.52	8,481	0.197079821	1,671	26686.02901	0.1
Equipment Rental	0.91	5,077	0.24102252	1,224	26205.88235	0.0
Bait and Ice	6.77	37,774	0.105851657	3,998	19902.47277	0.2
Charter Boat fee	0.00	0	0.229005998	0	24,860	0.0
<b>Total</b>	<b>41.53</b>	<b>231,719</b>		<b>28,300</b>		<b>1.7</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	2.338143047			66,170		2.2
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	<b>99,255</b>	Lower	<b>2.8</b>
Upper 2.5			Upper	<b>115,798</b>	Upper	<b>3.3</b>
Proprietors Income to						
Total Income by Work	0.164550026			% County by		% County
Proprietors Income				Place of Work		0.003%
to Employment	21027.31293			0.001%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.001%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

# APPENDIX E

Table E.25. Private Boat Diving - Preferred Alternative - Federal Waters - Ventura County Step 1 Analysis

Expenditure Category	Expenditure Per Person Per Day \$	Total Expenditures \$	Wages to Sales Ratio	Wages & Salary	Wages to Employment Ratio	Employment
Boat Gas & Oil	19.00	7,168	0.037661501	270	13,082	0.0
Air Refills	7.00	2,641	0.229005998	605	24,860	0.0
Ice	2.50	943	0.105851657	100	19,902	0.0
Boat Ramp Fee	1.50	566	0.229005998	130	24,860	0.0
Food & Drink	11.00	4,150	0.167627006	696	11,507	0.1
Auto Gas	9.00	3,395	0.037661501	128	13,082	0.0
Equipment Rental	5.00	1,886	0.24102252	455	26,206	0.0
Total	55.00	<b>20,749</b>		<b>2,382</b>		<b>0.1</b>
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	2.338143047			5,570		0.2
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0			Lower	<b>8,355</b>	Lower	<b>0.2</b>
Upper 2.5			Upper	<b>9,748</b>	Upper	<b>0.3</b>
Proprietors Income to						
Total Income by Work	0.164550026			% County by		% County
Proprietors Income				Place of Work		0.000%
to Employment	21027.31293			0.000%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment is calculated by using the following formula:  $(\beta x)/\gamma + y$  (see below for definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

x=Wages and salaries

y=employment

X=Direct wages and salaries

Y=Direct Employment

## APPENDIX E

Table E.26. Recreation Consumptive Activities - Preferred Alternative - Federal Waters - LA County Step 1

	Charter Boat Fishing		Charter Boat Diving		Private Boat Fishing		Private Boat Diving	
	Boundary	% of Study	Boundary	% of Study	Boundary	% of Study	Boundary	% of Study
	Alternative	Area <sup>2</sup>	Alternative	Area <sup>2</sup>	Alternative	Area <sup>2</sup>	Alternative	Area <sup>2</sup>
Person-days	8	0.59%	32	8.71%	322	2.93%	84	1.62%
Market Impact								
Direct Sales	\$ 1,156	0.59%	\$ 6,326	8.72%	\$ 13,380	2.93%	\$ 4,640	1.62%
Direct Wages and Salaries	\$ 333	0.59%	\$ 2,102	8.72%	\$ 2,512	2.93%	\$ 869	1.62%
Direct Employment	0	0.55%	0	7.24%	0	2.93%	0	1.62%
Total Income								
Upper Bound	\$ 583	0.59%	\$ 3,678	8.72%	\$ 4,396	2.93%	\$ 1,521	1.62%
Lower Bound	\$ 500	0.59%	\$ 3,153	8.72%	\$ 3,768	2.93%	\$ 1,304	1.62%
Total Employment								
Upper Bound	0	0.55%	0	10.86%	0	2.93%	0	1.62%
Lower Bound	0	0.69%	0	9.05%	0	2.93%	0	1.62%
Non-Market Impact								
Consumer's Surplus	\$ 95	0.59%	\$ 367	8.72%	\$ 3,730	2.93%	\$ 977	1.62%
Profit <sup>1</sup>	\$ 49	0.59%	\$ 179	8.72%	n/a	n/a	n/a	n/a

1. Profit is used as a proxy for producer's surplus.

2. Amount of activity/economic measure impacted by the alternative in the county divided by the total amount of activity/economic measure in the county related to the study area.

Table E.27. Charter Party Boat Fishing - Preferred Alternative - Federal Waters - LA County Step 1 Analysis

	Expenditure		Wages to		Wages to	
	Per Person		Sales		Employment	
Expenditure Category	Per Day \$	Total Expenditures \$	Ratio	Wages & Salary	Ratio	Employment
Food	15.47	126	0.175118965	22	12848.82845	0.0
Lodging	8.65	71	0.20181569	14	16112.61061	0.0
Private Transportation	16.64	136	0.119408566	16	19952.00329	0.0
Public Transportation	33.07	270	0.119408566	32	19952.00329	0.0
Boat Fuel	0.00	0	0.039248605	0	13772.40377	0.0
Access/Boat launch Fees	1.18	10	0.268261264	3	29734.05276	0.0
Equipment Rental	6.01	49	0.243828383	12	19544.97354	0.0
Bait and Ice	0.52	4	0.103146649	0	19023.1563	0.0
Charter Boat fee	59.95	490	0.205539552	101	28,630	0.0
Total	141.49	1,156		201		0.0
Total Income to				Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>
Wages & Salary	1.662507805			333		0.0
Regional Income						
Multiplier				Total Income <sup>3</sup>		Total Employment <sup>4</sup>
Lower 2.0		Lower		500 Lower		0.0
Upper 2.5		Upper		583 Upper		0.0
Proprietors Income to						
Total Income by Work	0.144206695			% County by		% County
Proprietors Income				Place of Work		0.00000000%
to Employment	26601.36574			0.0000000%		
Regional Employment						
Multiplier						
Lower 1.5				% County by		
Upper 2.0				Place of Residence		
				0.0000000%		

1. Direct wages and salaries is calculated using the following formula:  $xx$  (see below for symbol definitions).
2. Direct employment takes into account proprietors employment by using the following formula:  $(\beta x)/\gamma + y$  (see below for symbol definitions).
3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment

## APPENDIX E

Table E.28. Charter Party Boat Diving - Preferred Alternative - Federal Waters - LA County Step 1 Analysis

Expenditure Category	Expenditure Per Person Per Day \$	Total Expenditures \$	Wages to Sales Ratio	Wages & Salary	Wages to Employment Ratio	Employment
Lodging	53.00	1,680	0.20181569	339	16,113	0.0
Eating & Drinking	29.00	919	0.17046229	157	12,333	0.0
Transportation	10.00	317	0.11940857	38	19,952	0.0
Charter Boat fee	92.56	2,934	0.20553955	603	28,630	0.0
Miscellaneous	15.00	476	0.26826126	128	29,734	0.0
<b>Total</b>	<b>199.56</b>	<b>6,326</b>		<b>1,264</b>		<b>0.1</b>
Total Income to			Total Direct Income <sup>1</sup>		Total Direct Employment <sup>2</sup>	
Wages & Salary	1.662507805			2,102		0.1
Regional Income			Total Income <sup>3</sup>		Total Employment <sup>4</sup>	
Multiplier						
Lower 2.0			Lower	<b>3,153</b>	Lower	<b>0.1</b>
Upper 2.5			Upper	<b>3,678</b>	Upper	<b>0.1</b>
Proprietors Income to			% County by		% County	
Total Income by Work	0.144206695		Place of Work		0.00000001%	
Proprietors Income			Place of Residence			
to Employment	26601.36574		0.000002%			
Regional Employment			% County by			
Multiplier			Place of Residence			
Lower 1.5			0.000001%			
Upper 2.0						

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment takes into account proprietors employment by using the following formula:  $(\beta x)/\gamma + y$  (see below for symbol definitions).
3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment

# APPENDIX E

Table E.29. Private Boat Fishing - Preferred Alternative - Federal Waters - LA County Step 1 Analysis

Expenditure Category	Expenditure Per Person Per Day \$	Total Expenditures \$	Wages to Sales Ratio	Wages & Salary	Wages to Employment Ratio	Employment
Food	7.60	2,449	0.175118965	429	12848.82845	0.0
Lodging	1.20	387	0.20181569	78	16112.61061	0.0
Private Transportation	8.90	2,867	0.119408566	342	19952.00329	0.0
Public Transportation	1.89	609	0.119408566	73	19952.00329	0.0
Boat Fuel	12.74	4,105	0.039248605	161	13772.40377	0.0
Access/Boat launch Fees	1.52	490	0.268261264	131	29734.05276	0.0
Equipment Rental	0.91	293	0.243828383	71	19544.97354	0.0
Bait and Ice	6.77	2,181	0.103146649	225	19023.1563	0.0
Charter Boat fee	0.00	0	0.205539552	0	28,630	0.0
<b>Total</b>	<b>41.53</b>	<b>13,380</b>		<b>1,511</b>		<b>0.1</b>
Total Income to Wages & Salary	1.662507805			Total Direct Income <sup>1</sup> 2,512	Total Direct Employment <sup>2</sup>	0.1
Regional Income Multiplier				Total Income <sup>3</sup>	Total Employment <sup>4</sup>	
Lower 2.0			Lower	3,768	Lower	0.1
Upper 2.5			Upper	4,396	Upper	0.2
Proprietors Income to Total Income by Work	0.144206695			% County by Place of Work	% County	
Proprietors Income to Employment	26601.36574			0.00000%		0.000000%
Regional Employment Multiplier				% County by Place of Residence		
Lower 1.5						
Upper 2.0				0.00000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment takes into account proprietors employment by using the following formula:  $(\beta x)/\gamma + y$  (see below for symbol definitions).
3. Total income is calculated by using the following formula:  $X\mu''$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta''$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu''$  = Regional income multipliers (upper and lower range).

$\delta''$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment



## APPENDIX E

Table E.30. Private Boat Diving - Preferred Alternative - Federal Waters - LA County Step 1 Analysis

Expenditure Category	Expenditure Per Person Per Day \$	Total Expenditures \$	Wages to Sales Ratio	Wages & Salary	Wages to Employment Ratio	Employment
Boat Gas & Oil	19.00	1,603	0.039248605	63	13,772	0.0
Air Refills	7.00	591	0.205539552	121	28,630	0.0
Ice	2.50	211	0.103146649	22	19,023	0.0
Boat Ramp Fee	1.50	127	0.205539552	26	28,630	0.0
Food & Drink	11.00	928	0.170462286	158	12,333	0.0
Auto Gas	9.00	759	0.039248605	30	13,772	0.0
Equipment Rental	5.00	422	0.243828383	103	19,545	0.0
Total	55.00	<b>4,640</b>		<b>523</b>		<b>0.0</b>
Total Income to Wages & Salary	1.662507805			Total Direct Income <sup>1</sup> 869	Total Direct Employment <sup>2</sup>	0.0
Regional Income Multiplier				Total Income <sup>3</sup>	Total Employment <sup>4</sup>	
Lower 2.0			Lower	<b>1,304</b>	Lower	<b>0.0</b>
Upper 2.5			Upper	<b>1,521</b>	Upper	<b>0.1</b>
Proprietors Income to Total Income by Work	0.144206695			% County by Place of Work	% County	0.00000000%
Proprietors Income to Employment	26601.36574			0.00000%		
Regional Employment Multiplier				% County by Place of Residence		
Lower 1.5						
Upper 2.0				0.00000%		

1. Direct wages and salaries is calculated using the following formula:  $\alpha x$  (see below for symbol definitions).
2. Direct employment takes into account proprietors employment by using the following formula:  $(\beta x)/\gamma + y$  (see below for symbol definitions).
3. Total income is calculated by using the following formula:  $X\mu$  (see below for symbol definitions).
4. Total employment is calculated by using the following formula:  $Y\delta$  (see below for symbol definitions).

$\alpha$  = Ratio of total income to wages and salaries.

$\beta$  = Ratio of proprietors income to total income by work.

$\gamma$  = Ratio of proprietors income to employment.

$\mu$  = Regional income multipliers (upper and lower range).

$\delta$  = Regional employment multipliers (upper and lower range).

$x$ =Wages and salaries

$y$ =employment

$X$ =Direct wages and salaries

$Y$ =Direct Employment